



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

REPLY BRIEF FOR THE APPELLANT

Ex parte Cheng-Liang (Andrew) HOU

SYSTEM AND METHOD FOR LINKING LIST TRANSMIT QUEUE MANAGEMENT

Serial No. 10/716,529

Appeal No.: TBD

Group Art Unit: 2619

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Encl: Reply Brief

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
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In re the Appellant:

Cheng-Liang (Andrew) HOU

Appeal No.: TBD

Serial Number: 10/716,529

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Filed: November 20, 2003

Examiner: Chu, Wutchung

For: SYSTEM AND METHOD FOR LINKING LIST TRANSMIT QUEUE
MANAGEMENT

REPLY BRIEF

November 17, 2008

I. INTRODUCTION

This Reply Brief is filed in response to the Examiner's Answer dated September 15, 2008. In the Examiner's Answer, while no new grounds of rejection were explicitly made, comments and explanations were provided which are tantamount to new points of argument. This Reply Brief, therefore, is submitted to address these new points of argument, and to clarify why claims 1-17 of the pending application should be considered patentable over Rusu, *et al.* (U.S. Patent No. 6,137,807), and therefore, should be found by this Honorable Board of Patent Appeals and Interferences to be allowable.

This Reply Brief addresses a few of the deficiencies of the Examiner's Answer. Appellant's Appeal Brief, however, is maintained, and failure to repeat the arguments contained therein, or to address one or more arguments set forth in the Examiner's Answer

should not be construed as a waiver or an admission. The Appeal Brief speaks for itself, and this Reply Brief merely supplements the Appeal Brief to address certain aspects of the Examiner's Answer.

II. STATUS OF CLAIMS

Claims 1-17, all of the claims pending in the present application, are the subject of this appeal. Claims 1-17 were rejected under 35 U.S.C. §102(b) as being allegedly anticipated by Rusu, *et al.* (U.S. Patent No. 6,137,807) ("Rusu").

III. APPELLANT'S ARGUMENTS

Appellant respectfully submits that each of pending claims 1-17 recites subject matter that is neither disclosed nor suggested by Rusu. As discussed in Appellant's Appeal Brief, filed on June 4, 2008, at least on pages 11-14, Rusu fails to disclose or suggest, at least, "placing the determined address in an entry of a prior-determined address in the queue to form a linking list," as recited in claim 1, and similarly recited in claim 8-10 and 16-17.

In the *Response to Arguments* in the Examiner's Answer, the Office asserted that Rusu discloses these limitations of the claims, citing the teachings of Rusu at column 3, lines 37-38 and 51-55, column 3, line 57, to column 4, line 4, and column 4, lines 47-57 (See Examiner's Answer, paragraph (10)). The Examiner's Answer appeared to cite the same passages presented in the Final Office Action dated December 11, 2007.

A review of these passages in relation to the teachings of Rusu in its entirety and the comments and explanations presented in the Examiner's Answer demonstrates that Rusu fails to disclose or suggest the aforementioned features recited in claims 1, 8-10, and 16-17.

Rather, Rusu teaches a queue number, which is a 14 bit tag, indicating which queue memory bank (130, 131) a packet will be stored in (Rusu, col. 3, lines 35-37). Rusu further describes that each internal cell as output by the input processors (101, 102) is assigned a queue number by the queue controller (140). The queue number is appended to the respective cells by the input processors (101, 102) and placed in a routing tag field within each cell (Rusu, col. 4, lines 11-16).

In Figure 5, Rusu further describes that the queue controller (140) defines a memory location where the prepared cell will be sent based on the current queue memory bank (130, 131) availability, and if both banks (130, 131) are available, the bank chosen is that bank having the most available free memory space. If a memory bank (130 or 131) is currently in use, the queue controller (140) sends the prepared cell to the idle bank not in use. The dual bank queue memory system of Rusu allows for concurrent reading and writing to memory (Rusu, col. 4, lines 32-46). Hence, Rusu teaches that data in the memory banks (130, 131) is maintained in the form of queues on a FIFO (first in, first out) basis, organized by the link list (102) maintained by the queue controller (140) with the control memory (145) (Rusu, col. 4, lines 47-57). Accordingly, Rusu fails to disclose or suggest that the queue number is placed in an entry of a prior-determined address in the queue to form a

linking list. Rather, Rusu merely teaches that the link list (102) maintained by the queue controller (140) organizes data stored in the available queue memory banks (130, 131).

Appellant respectfully submits that the arguments presented in the Examiner's Answer failed to demonstrate that the "queue number," which the Final Office Action referred to as the "determined address" (see page 2 of the Final Office Action) is placed "in an entry of a prior-determined address in the queue to form a linking list," as recited in the claims (emphasis added).

Contrary to the assertions made in the Examiner's Answer, Rusu merely teaches that the control number is a 2-bit tag indicating information about a start, end, and a normal cell of a *packet*, not either of the queue memory banks (130, 131). Furthermore, the control header of a cell in a queue memory is established by the queue controller, whereby the control header includes link list pointers (or address) of the *data* (See Figure 7). Although the link list may be used to enable the operation of linking a header portion of a data cell stored in one queue memory to a tail portion stored in another queue memory, Rusu fails to disclose or suggest that the linking list, the control header ("control portion" referred to in the Examiner's Answer), or the control number, alone or in combination, disclose that the "queue number" (referred to as the "determined address" in the Examiner's Answer) is placed "in an entry of a prior-determined address in the queue to form a linking list," as recited in the claims (emphasis added).

The Examiner's Answer alleged that it would have been "inherent for an entry to be

a prior-determined address,” citing column 3, lines 37-38. As previously noted, a review of these passages demonstrates that Rusu is referring to a control number for the start, end, and a normal cell of a *packet*, not either of the queue memory banks (130, 131).

Furthermore, Applicant respectfully submits that it is a clear error for the Office to rely upon the theory of inherency without providing a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the prior art (See MPEP §2112).

Furthermore, Appellant respectfully traverses the statement in the Examiner’s Answer that the limitations following the phrase, “capable of,” as recited in claim 9, would not be considered as limiting the claim scope because the phrase does not positively support claim limitations. The Examiner’s Answer appeared to be relying upon MPEP 2111.04, which states that “claim scope is not limited by claim language that suggests or makes optional, but not require steps to be performed, or by claim language that does not limit a claim to a particular structure.” MPEP 2111.04 states that the following claim language *may* raise a question of as to the limiting effect of the language on the claim: “adapted to,” “adapted for,” “wherein” clauses, and “whereby” clauses.

However, MPEP 2111.04 further states that a determination of whether each of these clauses is a limitation depends on the specific facts of the case. *In Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005).

Appellant respectfully submits that the phrase “capable of” recited in claim 9 is

analogous to the commonly used phrase “configured to,” which denotes that the structural elements recited for the transmit queue system of claim 9 have a specific structural orientation that allows each structural element to be “capable of” performing the described function. For example, the free entry engine is structurally oriented in a manner that allows it to determine an address of a free entry in the queue. Therefore, the limitations recited following the phrase, “capable of” do limit the claim scope to particular structural elements for the transmit queue system.

Furthermore, Appellant respectfully submits that the comments relating to the phrase, “capable of” are rather untimely. The features recited in claim 9 using the phrase, “capable of” were originally presented in the filing of the original set of claims back on November 20, 2003. The Office has failed to present any arguments relating to these claim limitations until the Examiner’s Answer.

Accordingly, Appellant respectfully submits that the teachings of Rusu fail disclose or suggest each and every element recited in claim 1, and similarly recited in claims 8-10 and 16-17.

Claims 2-7 depend from claim 1, and recite additional features. Claims 11-15 depend from claim 10, and recite additional features. As outlined above, Rusu fails to disclose or suggest each and every element recited in claims 1, 8-10, and 16-17. Thus, claims 2-7 and 11-15 are patentable for at least the reasons claims 1 and 10 are patentable, and further, because they recite additional features. Accordingly, it is respectfully

requested that these rejections be reversed and claim 1-17 be allowed.

IV. CONCLUSION

As explained above and in the Appeal Brief, each of claims 1-17 recites subject matter which is neither disclosed nor suggested by Rusu. Therefore, Appellant respectfully submits that both the Final Office Action dated December 11, 2007, and the new grounds of rejection presented in the Examiner's Answer dated September 15, 2008, have failed to establish a *prima facie* case for anticipation to reject claims 1-17 under 35 U.S.C. §102(b) based on the teachings of Rusu. Accordingly, this final rejection being in error, therefore, it is respectfully requested that this honorable Board of Patent Appeals and Interferences reverse the Examiner's decision in this case and indicate the allowability of application claims 1-17.

For all of the above noted reasons, it is strongly contended that certain clear differences exist between the present invention as claimed in claims 1-17 and the cited reference relied upon by the Examiner.

In the event that this paper is not being timely filed, Appellant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees which may be due with respect to this paper may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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